

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:)	
Nadeen Myers)	
)	
Serial No.: 10/619, 971)	Examiner: Pratt, Helen F.
)	
Filing Date: July 15, 2003)	Group Art Unit 1761
)	
Title: <i>Compositions and Methods of Addition</i>)	Attorney Docket No. 41482-41410
<i>for Calcium Supplementation in</i>)	
<i>Transparent Beverages Using</i>)	
<i>Tricalcium Phosphate</i>)	

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.132

I, Nadeen B. Myers, declare and state as follows:

1. All of the statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true.
2. I am the sole inventor of U.S. Patent Application No. 10/619,971 filed on July 15, 2003.
3. I hold a B.S. degree from Idaho State University in Chemistry. I have worked in various capacities in the field of food chemistry since 1992. My work history is provided in Exhibit I.
4. As an active practitioner in the field of food chemistry since 1992, I am qualified to execute the teachings of Hutt et al. described in U.S. Patent 6,730,337.
5. I have determined that the calcium supplemented fluid compositions described by Hutt et al. described in U.S. Patent 6,730,337 do not provide a fluid that is free of sediment and do not provide a fluid that is not turbid or opaque. To make this determination, a side by side comparison of the fluids obtained by the method of Hutt et al. and by the method of U.S. Patent Application 10/619, 971 was made. This side-by-side comparison of the claimed dissolution of tricalcium phosphate (TCP) at a pH that is between 2.0 and 3.5 and the Hutt et al. pH of 3.7 was conducted using pure apple juice with no additives. The pH of the apple juice prior to the

addition of the TCP was 3.17. Two beverage samples were then prepared using 20% of the RDA for calcium in a 250 ml serving. The apple juice samples were placed on a stir plate and a calibrated pH probe was inserted to monitor the pH of the beverage as the TCP was added. According to Hutt et al., the pH of the beverage was adjusted with a 30% solution of citric acid to keep the pH between 3.7-3.9 (column 3, lines 51-52 and the Example at column 4, lines 15-30). The Hutt et al. sample remained on the stir plate and the pH was monitored for 20 minutes. A similar set up was then used for a second 250 ml sample of juice, except that the pH was maintained at 3.17 (as in the unfortified apple juice) with the addition a 30% solution of citric acid. After 20 minutes, the TCP was completely in solution and the apple juice was clear enough that the bottom of the glass was visible in the calcium fortified apple juice in which the pH was maintained at 3.17. In contrast, the apple juice maintained at a pH of 3.7 (final pH was 3.76) in accordance with the teachings of Hutt et al. was very cloudy and the bottom of the glass was not visible. The difference in clarity between the apple juice prepared at pH 3.17 (right hand side of Exhibits ^{same} II and III, Exhibit IV) and the apple juice prepared as per Hutt et al. (left hand side of Exhibits ^{same} II and III, Exhibit V) is evident. The Hutt et al. fluid is turbid and opaque.

6. Although Hutt et al. disclose that tricalcium phosphate is a viable calcium source that is soluble at a pH of 4.5, this side-by-side comparison clearly demonstrated that even at a pH of 3.7, the beverage was still not clear. Hutt et al. teach that calcium lactate is the preferred calcium source for their beverage, most likely because calcium lactate is much more soluble than tricalcium phosphate in their less acidic, nearer to neutral desired pH range.

8. I understand that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of this application or any patent issuing therefrom.



Nadeen B. Myers

DATED: February 5, 2007